

# Department of Natural Resources

MICHAEL R. STYLER Executive Director

Division of Oil, Gas & Mining

MARY ANN WRIGHT Acting Division Director

JON M. HUNTSMAN, JR.

GARY R. HERBERT Lieutenant Governor

February 11, 2005

CERTIFIED RETURN RECEIPT 7099 3400 0016 8896 1553

Michael Pauletto
I&P Investments, LLC
10517 N.E. 50<sup>th</sup> Avenue
Vancouver, Washington 98686

Subject: Third Review of Notice of Intention to Commence Large Mining

Operations, I&P Investments, LLC, Green Peak Quarry, M/003/060, Box

Elder County, Utah

Dear Mr. Pauletto:

The Division has completed a review of your draft response to the Division's December 7, 2004 technical review for the Green Peak Quarry, located in Box Elder County, Utah. Your response was received by the Division on December 17, 2004. After reviewing the information, the Division has the following comments which still need to be addressed before tentative approval may be granted. Please note, *you are not authorized to operate* within any of the proposed areas until your notice is approved by the Division and the appropriate surety is posted.

The comments are listed below under the applicable Minerals Rule heading. Please format your response in a similar fashion. Please address only those items requested in the attached technical review. Please send replacement pages of the original notice using redline and strikeout text, so we can see what changes have been made. After the notice is determined technically complete and we are prepared to issue final approval, we will ask that you send us two clean copies of the complete and corrected plan. Upon final approval of the permit, we will return one copy stamped "approved" for your records. Please provide a response to this review by March 11, 2005.

Michael Pauletto Page 2 of 7 M/003/060 February 11, 2005

The Division will suspend further review of the Green Peak Quarry Notice of Intention until your response to this letter is received. If you have any questions in this regard please contact me, Lynn Kunzler, or Doug Jensen of the Minerals Staff. If you wish to arrange a meeting to sit down and discuss this review, please contact us at your earliest convenience. Thank you for your cooperation in completing this permitting action.

Sincerely,

Daron R. Haddock Permit Supervisor

Minerals Regulatory Program

2 Haddock

DRH:LMK:jb Attachment: Review #3

cc: Michael Nelson, BLM, SLFO Cindy Emmons, Consultant

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# THIRD REVIEW OF NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATIONS

# I&P Investments, LLC. Green Peak Quarry

# M/003/060 February 11, 2005

Note: Text in *italic print* are comments from our previous review. Text in normal print are new comments specific to the December 17, 2004 submittal.

## R647-4-105 - Maps, Drawings & Photographs

# 105.1 Topographic base map, boundaries, pre-act disturbance.

Please provide a topographic base map which accurately identifies and outlines the various areas of disturbance. This map should also identify the area permitted under the current small mining notice and needs to be a minimum scale of 1"=200'. The map currently provided (no scale identified, but appears to be about 1"=1500') does not identify the current area for the small mine notice, nor does it accurately identify the boundaries of the proposed large mining operation (the Division digitized this map and found about 27.1 acres of disturbance, yet the plan discusses only 10 acres). (LK)

# 105.2 Surface facilities map

Please make sure each feature (roads, quarry area, dump, etc) is uniquely identified on the map. This map needs to be at a minimum scale of 1"=200'.

Please show on this map how the growth medium stockpile will be accessed.

A reclamation treatments map should be included in the plan showing areas to receive various reclamation treatments shaded, cross-hatched or color coded to identify which treatments will be applied. This map should be in a scale of a minimum of 1"=200' for acreage and surety calculations.

# 105.3 Drawings or Cross Sections (slopes, roads, pads, etc.)

Please provide typical cross sections of all quarry areas, waste piles, dump slopes, roads, etc. including pre-mine topography, mined out topography and proposed reclamation topography. Show the locations of the cross sections on the surface facilities map. Also, cross sections perpendicular to the ones provided are needed.

#### R647-4-106 - Operation Plan

## 106.3 Estimated acreages disturbed, reclaimed, annually.

Please identify on the map the acreage for each area. Correctly identify the acreage for each area of disturbance (i.e. the plan states there are 2 acres of existing quarry, 3 acres of new quarry, 2.2 acres of current millsite area, 1 acre of road, 1.7 acres of waste dump and 0.1 acres for the growth medium stockpile - total = 10.0 acres. However, the reclamation cost estimate (Attachment 10) identifies 10 acres of hilltop (assumed quarry), 2.2 acres

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staging area, 2 acres of waste dump top, and 0.7 acres of road, for a total of 14.9 acres - and yet 18 acres will be fertilized, mulched and seeded. Please explain these differences.

## 106.5 Existing soil types, location, amount

The soil survey information provided does not provide the detailed analysis that the Division requested. This information is needed to evaluate and determine what types and rates of amendments that may be needed to re-establish an effective vegetation community. About all that can be assumed from the data is that there is not a salt problem and that the soil is very low in organic matter. Please provide plans to obtain the requested data. (LK)

The resubmitted plan indicates that this data will be collected and provided to the Division in the Spring of 2005. Please provide this data by April 1, 2005. (LK)

Your proposal to use straw or hay to improve organic matter is not likely to make a significant improvement in the % organic matter. Please change your plans to use composted manure at a rate of 10 ton/acre. This is expected to increase the organic matter to an acceptable level. (LK)

Even though this recommendation was made (see page 7 of the resubmittal), at the end of the modified paragraph and in the next paragraph, the plan still indicates hay and fertilizer is planned for. Please eliminate all references to using 'hay and fertilizer' for soil amendments. Please refer to comments under R647-4-107.5 for estimated total amount of soil material that should be stockpiled (current and proposed). (LK)

# 106.5 Plan for protecting and redepositing soils.

Please describe how growth medium will be replaced at the time of reclamation, including depth of redeposited soils. Show on the reclamation map areas that will not receive any growth medium, and the depth of growth medium for areas where it will be replaced. (LK)

#### 106.7 Existing vegetation - species and amount

The vegetation information provided in the soil survey data is not adequate. This is 'frequency' data, not 'ground cover' data. Since the neighboring Rosebud Quarry (Star Stone Quarries, Inc.) is mostly with the same soil type as your operation, it is expected that the vegetation ground cover would be about the same. Their vegetation survey resulted in 33% ground cover. For now, the Division will use this figure for analysis. Since it is too late in the season to collect accurate vegetation data, this will need to be verified next field season. (LK)

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The resubmitted notice now reports a vegetation ground cover of 15%. The source of this figure is not substantiated or supported (documented) in the Notice. Please provide documentation (name of individuals who collected the data, dates of data collection, a map showing the location of transects/sample points, etc.). Without this documentation, the Division will use the vegetation report that was provided for the adjacent Rosebud Quarry (Star Stone Quarries, Inc.) until such time that it can be validated. (LK)

## **R647-4-107 - Operation Practices**

# 107.1 Public safety & welfare

#### 107.1.14 Posting warning signs

The blasting protocol needs to be on the warning signs as well. Especially the type of signal (siren) that will be used to warn of the impending blast, as well as the signal to indicate that the blast area has been cleared (post-blast). (DJ)

## 107.3 Erosion control & sediment control

The response to our last review included the following comment or concern which was not addressed, please address this item. The access road drainage will drain to natural drainages that do not exist, according to the map. If culverts are needed or cross drains with riprap protection are to be installed please provide the locations and designs. (TM) The BLM has indicated that culverts are needed. Therefore, please provide a map showing the location of the culverts as well as detailed designs of the culverts and outflow riprap. (TM)

#### 107.5 Suitable soils removed & stored

The plan does not explain why only 400 cy of the estimated 2400 cy of growth medium will be salvaged; nor has a variance been requested to not salvage all available topsoil. The resubmittal did not address what happened to the growth medium from the original permitted quarry area (estimated 1600 cy of material), nor from the current staging area (estimated 3000 cy of material). If this was not salvaged, a suitable substitute material will need to be identified to replace this resource. The plan states that approximately 10 inches of soil material will be salvaged from the waste rock disposal area for a total of approximately 2100 cy. At 10-inch depth, approximately 1350 cy/acre is produced for a total of approximately 2700 cy for the 2-acre waste rock area. In summary, there should be approximately 4600 cy of material salvaged from the existing permit, and an additional 5100 cy of material should be salvaged for the proposed disturbance (3 acres of quarry and 2 acres of waste dump). (LK)

Map 2 and Map 7 show the location of the 'growth medium stockpile' in two different locations. Which map is correct, or will there be two stockpiles? Please show the access road to the stockpile areas(s). (LK)

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## R647-4-110 - Reclamation Plan

## 110.2 Roads, highwalls, slopes, drainages, pits, etc., reclaimed

The plan states waste rock remaining above the level of the quarry walls will be contoured. Please estimate the total amount of area which would require this contouring and state the final slope angle of these walls. (DJ)

This comment is not addressed in the latest submittal. (DJ)

Please state in the plan the ground preparation procedures that will take place in the quarry areas prior to seeding. (DJ)

The quarry floor should be ripped to a depth of 2 feet to remove compaction before the area is seeded. (DJ)

The plan states that the road from the County road to American Stone's quarry will not be reclaimed, and only one acre of the road (the top switchbacks) will be reclaimed - what about the remaining road between the top switchbacks and American Stone's quarry - this needs to be reclaimed as well. It is approximately 5400 feet from American Stone's quarry to your quarry on the top of the hill. The acreage of this road has not been provided, nor can it be calculated since the average road width for each segment has not been provided. Just the 14-foot travel width involves 1.7 acres. In addition, the acreage involved with the cut and fill slopes, and safety berms needs to be included (this could easily double the acreage involved). (LK)

A proposal is made that ~4000 cy of material will be left at the millsite as a resource for rock hounds. In recent conversations with the BLM, they indicated that this proposal was not acceptable to them. However, they would allow approximately 100 cu. yds. of rock to remain on the existing millsite area. This would be in the form of a berm approximately 4 feet high along the immigrant trail road. This material should be screened prior to placing in the berm so that fines and small (gravel) fragments are not part of the berm. This would serve a dual purpose in providing materials for rock hounds, as well as adding protection to the 'reclaimed' millsite area. Please incorporate these figures into your plan. (LK)

This material can be left at the millsite during the reclamation of the site, but as a part of the final closure of the quarry the material will need to be moved back to the quarry. Because this amount of material is estimated to accumulate at the millsite, the surety should contain a line item for the removal of this mining waste. (DJ)

The plan states that the growth medium stockpile area will be recontoured and seeded. This area will need to be ripped to a depth of a minimum of 2 feet to remove compaction before seeding. (DJ)

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The plan states that an area for the discharge of water from the roadside drainage will flow down the hill in a rip-rap channel. Please include the specifications to be used to construct this channel. Also areas to be disturbed to construct this feature should be included in the total disturbance for the site. (DJ)

On page 5 of the latest submittal the plan states the waste pile will be left at angle of repose. On page 8, the waste pile is to be recontoured to an overall slope of 3:1 and 10" of soil placed on the slope. The plan should be consistent, please remove the statement that the dump will be left at an angle of repose. (DJ)

The plan indicates that 6" of growth medium will be placed on the roadway during reclamation. Please state how the soil will be delivered and placed on the reclaimed roadway. The cost of the delivery of this soil should be included in the surety estimate. (DJ)

#### 110.5 Revegetation planting program

The use of straw and/or hay is not appropriate for increasing the organic content of the growth media. Please plan to use 10 ton/acre of composted manure or biosolids. (LK)

Please see comments under R647-4-106.5 (LK)

The latest submittal states that the topsoil pile will be piled ~12 feet deep. In order to maintain the integrity of the soils in this pile, the piles should not exceed 6 feet in depth. (DJ)

#### R647-4-113 - Surety

The cost for the construction and reclamation of the rip-rap channel should be included in the surety estimate. (DJ)

The cost for regrading the waste to be stored in the initial quarry site should be included in the surety estimate. (DJ)

Topsoil replacement shown in the surety estimate indicates that all topsoil will be replaced using a dozer. The distances required for the replacement of this soil is too great for the use of a dozer. The efficiency of the use of a dozer at these distances is not economical; the use of a truck and loader will be required for a portion of this effort. Also the total amount of soil to be replaced should be changed to reflect soil quantities in this review. (DJ)

A blank reclamation surety estimate is included in this review in order to furnish updated costs. (DJ)

RECLAMATION SURETY ESTIMATE

mine operator mine name

last revision

filename M000-000.xls

County

DOGM file Number Prepared by Utah State Division of Oil, Gas & Mining

Note: actual unit costs may vary according to site conditions last unit cost update 10/07/02  Amount of disturbed area which will receive reclamation treatments = acres						l
amount of disturbed area which will receive reclamat Estimated total disturbed area for this mine  =	ion treatments	n treatments =			acres acres	
Activity	Quantity	U	nits	\$/unit	\$	Note
afety gates, signs, etc (mtls & installation)	0		Sum	200	_	(1)
emolition of buildings & facilities	C	) cf		0.26	0	(2)
ebris & equipment removal - trucking	o	) trips		55	0	(3)
ebris & equipment removal - dump fees	C	) ton		60	0	(4)
ebris & equipment removal - loading trucks w/FEL	0	) hours		180		(5)
emolition & debris removal - general labor	0	hours		15		(6)
egrading facilities areas (2ft depth)	0	acres		613		(7)
egrading waste dump slopes	0	CY		0.60	0	(8)
lipping waste dump tops	0	acre		246		(9)
tipping stockpile & compacted areas	0	) acre		246	0	(9)
ipping pit floors	0	) acre		246	0	(9)
tipping pit access roads (2ft depth)	0	acre		613		(9)
reating safety berms or barriers around highwalls	0	LF		0.20		(10)
ipping access roads- dozer	0	) acre		246	0	(9)
legrading access roads - dozer	0	acre		246		(9)
idecast mtl replacement of steep slopes - trackhoe	0	) LF		1.16		(11)
urface drainage restoration or construction	0	) LF				(10)
opsoil replacement - dozer	0	CY		0.50	0	(12)
opsoil replacement - scraper	0	CY		1.19	0	(13)
opsoil replacement- truck and FE loader	0	CY		2.60	0	(14)
lulching (2 ton/acre alfalfa/straw)	0	acre		350	0	(00)
ertilizing (100 lb/acre diammonium phosphate)	0	acre		90	0	(00)
omposted manure (10 ton/acre)	0	acre		300	0	(00)
roadcast seeding	0	acre		240	0	(00)
rill Seeding	0	acre		205	0	
ydroseeding	0	acre		800	0	
eneral site cleanup & trash removal	0	acre		50	0	(00)
quipment mobilization	0	equip		2000	0	(00)
eclamation supervision -10% of reclamation estimate						(15)
09/ Cantingana		Subtota	al		0	
0% Contingency		Subtota	al		0 0	
scalate for 5 years at 4.44% per year					0	
		Total			0	